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Circular Letters:

Anesthetic Explosions: Very little, if any, material on anesthetic explosions has been presented from the standpoint of the thoracic surgeon. Only a few cases of survival in an anesthetic explosion have been recorded. It is quite probable that the pulmonary manifestations presented in the case report are primarily due to the blast of the explosion and simulate to a degree the blast noted in warfare, as well as in civilian life. The occurrence of anesthetic explosions in the operating room is statistically uncommon. It is still too frequent, however, considering the danger to the patient, the operating room personnel and the physical surroundings. Inasmuch as there has been no apparent decrease in the number of explosions, despite the numerous precautions recommended and undoubtedly practiced, it is important that the results and sequelae of such an explosion be immediately recognized and handled expediently.

The author cites a recently encountered anesthetic explosion which resulted in severe hemorrhage into the paraorbital tissues; lacerations of the nasopharynx with profuse hemorrhage; prolonged hemorrhage from the tracheobronchial tree; production of a bilateral hemorrhagic pneumonia; spontaneous pneumothorax with an accompanying subcutaneous and mediastinal emphysema and pneumopericardia.

The patient was a 56 year old male who was hospitalized for the treatment of glaucoma. There was an associated diabetes mellitus and hypertension, the blood pressure being 170/110. On the 5th hospital day the patient was operated, the surgery consisting of cyclodiathermy to the right eye. Anesthesia consisted of intravenous sodium pentothal with oxygen and nitrous oxide administered through a nasopharyngeal tube. At the conclusion of the operation there was a loud explosion and the nasopharyngeal tube was blown out of the patient's nose, followed by profuse hemorrhage from the nose and mouth. The patient's condition quickly became critical. Respiration became labored and he became quite cyanotic. The author, who happened to be in the hospital, was called to see the patient. A 7 mm. bronchoscope was passed immediately with suction and aspiration of a large quantity of blood from the tracheobronchial tree. The blood pressure, which had dropped to 80/40, gradually rose to 140/60. However, hemorrhage continued from the tracheobronchial tree, nasopharynx, and into the paraorbital tissues with marked swelling of the right cheek. The nasopharynx was packed through the mouth to control the hemorrhage and prevent blood from running into the trachea; the anterior nares were packed with gel foam. The bronchoscope was left in place for 50 minutes, but bleeding from the tracheobronchial tree continued, so an endotracheal tube was inserted to facilitate aspiration and to maintain an adequate airway. The patient was returned to his room in fair condition; he was then placed on continuous oxygen, the tracheobronchial tree aspirated frequently and a blood transfusion started. After receiving about 500 cc. of blood, the blood pressure was 100/70, the rectal temperature 101.2°F., pulse 104 and respirations 26. There were definite Cheyne-Stokes respirations for the 1st

hour and the patient did not regain consciousness for about 3 hours. Parenteral penicillin was also begun. On the afternoon following the explosion, subcutaneous emphysema developed over the right anterior chest. Bleeding continued from the tracheobronchial tree and about 600 cc. of bloody fluid had been aspirated through the endotrocheal tube. Hemorrhage from the nasopharynx and into the paraorbital tissues was apparently controlled. A portable x-ray of the chest revealed marked subcutaneous emphysema of the thoracic wall and cervical area; marked bilateral infiltration of the lung fields, more extensive on the right side, and a small pneumothorax space on the right side with mediastinal emphysema. The following morning the patient appeared to be in fairly good condition. The blood pressure was at the preoperative level, the subcutaneous emphysema had not increased, there was no dyspnea and bleeding from the tracheobronchial tree had apparently stopped. The packing was removed from the nasopharynx and the nose and also the endotracheal tube was removed. In the afternoon of the 2d postoperative day the patient developed progressive respiratory distress, the subcutaneous emphysema increased and extended to the head and neck and the degree of pneumothorax was greater. An intercostal catheter was introduced on the right side and attached to underwater drainage. There was an immediate escape of air with relief of the dyspnea and the patient was again comfortable. Three days later the spontaneous pneumothorax recurred and was treated by repeated aspirations. Seven days following the explosion the lung was reexpanded and his general condition excellent. On the 14th day following the explosion the patient was discharged to the care of the ophthalmologist.

The exact mechanism of the anesthetic explosion in this case has never been ascertained. The occurrence of such an accident should emphasize the importance of safety measures. It is obvious that the prevention of such explosions is of prime importance, not only for the safety of the patient and personnel, but also from medico-legal viewpoints.

Recommended safety precautions have been summarized by Cole as follows: The role of the manufacturer of anesthesia apparatus includes the production of equipment which will reduce the possibility of ignition of combustible gases. Precautions to be taken by the anesthetist include: (a) the avoidance of combustible agents in the presence of obvious hazard, such as the cautery; (b) eliminating the practice of washing out patient and apparatus with oxygen following an anesthesia; (c) use of caution in spilling gas; (d) employment of the intercoupler or the maintaining of continuous contact by the anesthetist with patient and machine; (e) use of the rebreathing technic; (f) washing tubes, bags and mask with water or calcium chloride solution; (g) elimination of unnecessary, sudden movements by the anesthetist, and of unnecessary adjustments of the mask. The duties of the hospital are: (a) the installation of safe lights, switches and electrical wiring; (b) the maintenance of a high humidity in the operating room; (c) prohibition of wool, silk and ordinary rubber; (d) banning of visitors from the area surrounding the anesthesia apparatus; (e) banning of open flame, cigarettes, etc. from the operating room; (f) the con-

struction of grounded, conductive floors. (J. Thoracic Surg., April '51, M. G. Buckles)

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Measurement of Blood Loss During Surgical Operations: The importance of proper replacement of blood loss during and after operation has been recently re-emphasized by several clinical investigators who have demonstrated that although there is a compensatory increase in plasma volume and circulating plasma proteins following uncompensated blood loss in the well-hydrated patient, there is no such compensatory increase in the red blood cells. In such cases in which blood loss is not replaced, the depleted red cell volume does not return to normal until several weeks after the loss occurs. In other words, the body is able to compensate for loss of plasma but its ability to restore depleted red cells is very limited. In addition, these investigators have shown by blood volume studies that there is not only loss of blood from the wound where it is apparent, but there is also a loss into the tissues, in the surgical specimen and in the vessels proximal to the ligatures (where it is immobilized and therefore lost to the circulating blood) which is not apparent. These studies have also revealed that there is usually a postoperative loss which may be significant and at times may be as large or larger in amount than the operative loss. Because such losses are usually insidious, the clinical signs customarily observed following acute blood loss may be absent.

This decrease in oxygen-carrying red blood cells causes varying degrees of hypoxia which increase the postoperative morbidity, and if the patient's condition is such, may lead to severe disturbances of the cardiocirculatory mechanism and possibly end up in circulatory failure. It is mandatory, therefore, that the surgical team replace the blood loss during the operation as the patient loses it, for it is much simpler to prevent shock than to treat it after it has occurred. Although most surgeons and anesthesiologists well appreciate the problem, there are those who hesitate and even object to giving blood during the operation because they are convinced that their surgical technic precludes large blood losses and often blame the anesthesia if shock does occur. It may be appropriate, therefore, to point out at this time that a review of the literature is impressive by the fact that all of the investigators concluded that (1) the blood loss is always greater than they had anticipated or estimated, (2) procrastination on the part of the surgeon in replacing blood loss during and after operations should be condemned, (3) accurate measurements and replacement not only affords the patient optimal prophylaxis and therapeusis but also leads to a better appreciation of the problem by the surgical team. In order to have optimal effects the blood must be administered as it is being lost and in proper amounts.

The gravimetric method affords the surgical team a simple and practical means of accurately measuring the amount of blood loss from the surgical

wound. As there is usually additional blood lost into the tissue and in vessels just proximal to ligatures, the amount determined by the gravimetric method is the minimal amount to be replaced.

The blood loss in 748 surgical procedures has been determined by the authors. The average blood loss as found by 17 other investigators is also presented. (Am. J. Surg., May '51, J. J. Bonica & C. S. Lyter)

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Cutaneous Inoculation Tuberculosis: Physicians and others who work with the sick or recently deceased can contract tuberculosis by skin inoculation. Most of these medical workers are not sufficiently aware of this potential danger to themselves. Moreover, discussion of the most effective methods of treatment has not been widely disseminated. Accordingly, it is hoped that the analyses and conclusions drawn from this study may prove to be of assistance in choosing the best possible treatment for this disease.

After tubercle bacilli are inoculated into the skin of man, the lesion either may be localized at the site of inoculation or it may spread. Progression occurs usually by way of the lymphatics to the regional nodes in which inflammation, swelling, caseation, fluctuation, and spontaneous drainage may be anticipated. If the lesion remains local because of a previous increase in the defensive power of the host, it all too frequently becomes an indolent ulcer which persists for many months.

The behavior of tuberculosis incurred as a pulmonary infection is similar to that seen after skin inoculation. The mediastinal lymph nodes enlarge greatly with a primary pulmonary infection, but there is no change seen in the nodes when they are in the drainage pathway of a post-primary parenchymal infection. To be sure, exceptions to these rules occur.

Koch demonstrated the difference between a primary and a secondary skin inoculation with tubercle bacilli in the guinea pig. In the animal which had had a previous inoculation or vaccination of this disease, the lesion was confined to the site of introduction; but in a susceptible animal the disease spread to the regional nodes and frequently entered the blood stream. While these patterns may be transposed to man, there are patients whose second infection behaves like a primary infection.

If it be presumed that tuberculosis has the same basic behavior in different parts of the body, observations made in the treatment of pulmonary tuberculosis and in the treatment of cervical tuberculous adenitis have bearing on the problem of the treatment of skin inoculation disease. It is well recognized that caseous pulmonary lesions may resist all types of medical therapy while surgical excision of a lobe or lung containing a lesion of this type may be the road to health for the patient. In a similar way, caseous tu-

berculous nodes in the neck may be most completely and quickly eradicated by excision. If tuberculosis is being treated in any part of the body, the thought of the use of chemotherapy in conjunction with surgical excision must be kept in mind. There is always a danger that if chemotherapy is used as a primary agent for therapy, a drug-resistant infection may appear and the optimal time for adjunct surgery may be missed.

The review of the literature and 2 of the cases reported in this paper suggest that surgical excision of tuberculous disease usually results in a prompt cure of the disease. This method of treatment may prevent protraction of the disease. If the cutaneous lesion and the involved lymph nodes are discrete and small, complete and immediate removal is the quickest and surest method of cure. If the patient has never had streptomycin therapy or if the infecting organisms are not streptomycin resistant, a short course either of streptomycin or of one of the newer antituberculous drugs, together with such general measures as good nutrition, general rest for fever and fatigue, and local rest of the involved part, are indicated. During the time that chemotherapy is being given, it is wise to excise the inoculation ulcer.

X-ray therapy has had general acceptance as a method of treatment per se and as an adjunct to other methods. It increases the fibrous reaction around the lesion and encourages healing by the formation of scar tissue; but is ineffective in caseous or abscessed glands, even encouraging abscess formation in lymph nodes which are approaching liquefaction. Some internists experienced in the field of tuberculosis are very much opposed to the use of such therapy for the treatment of tuberculous lymph nodes in the neck because of the fact that occasionally one sees patients with miliary tuberculosis who have recently had deep X-ray therapy for cervical nodes. On the other hand, in adult patients with miliary tuberculosis enlarged superficial lymph nodes are not at all uncommon. As a consequence, the existence of a causal relationship between X-ray therapy and the development of miliary tuberculosis has not been established with certainty.

If either extensive caseation or liquefaction is present, it is unlikely that antimicrobial therapy could be effective because of the avascularity of the mass of necrotic tissue and other factors. Complete walling off of the lesion by scar formation or by its spontaneous evacuation would require many months for completion. Such diseased tissue should either be removed by excision or evacuated by incision and curettage. All surgical procedures except the simplest incision and drainage should be delayed until the systemic reaction in the patient has subsided and until his general condition is good. Streptomycin is beneficial in the preparation of the patient for surgery and in the assurance of good postoperative results. (Am. Rev. Tuberc., May '51, E. D. Grady)

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The Tinian Leprosarium for the Trust Territory of the Pacific Islands:

After the close of World War II, the United Nations Security Council designated Micronesia (the Marshall, Caroline and Northern Marianas Islands, with a total population of 54,000 natives) as a Trust Territory of the United States. The Navy has been the administering department. On a basis of a leprosy survey in Guam in the late 1930's, it is estimated that there are about 350 cases of leprosy in the Trust Territory. To isolate and treat these patients, a leprosarium was established on Tinian, where an initial group of 53 Yapese patients arrived by Navy ship on 7 September 1948.

Physical Plant. At the time of the opening of the institution at an old Japanese fishing company site in September 1948, there were about 50 individual huts, in size about 10 x 16 feet, 8 or 10 wooden frame cook-houses, 4 pit-type toilets, an old boat house and 2 other buildings which served as office, laboratory, examining room, operating room, supply rooms, and patients' store, etc. Early in 1949 a Sea Bee construction unit erected two 10-bed quonset-type hospital wards and another quonset housing the office, pharmacy, x-ray, laboratory and operating room. Another Sea Bee unit in the first half of 1950 added an adequate hospital galley, a tuberculosis isolation ward, 6 community type concrete decked flush toilets with showers, with separate sides for males and females, 18 community type cook-houses with wood burning galvanized metal stoves to replace the original old fire hazards, a sewage system emptying in the Pacific and an adequate power plant. The patients have built 2 church buildings and a combined school-recreation hall.

Patients. About half of the patients are in sufficiently good health to be employed, despite varying degrees of crippling of their hands and feet. They work on the produce farm, do landscape work, care for the plant nursery, the pigs and chickens, do carpentry and maintenance, assist in the hospital as untrained "nurses" and in x-ray and laboratory, and as cooks and food handlers in the hospital galley. In addition, they work in the patients' store and food issue room and in the central laundry. One patient works as a barber, another as a sewing room attendant, and a third cares for the combined school and recreation hall. No one is forced to work, but most want to and expect to. In addition to their regular food and clothing allowance, those who work receive $2.50 per week. Those unable to work receive $1.00 per week.

Because ample fruits and vegetables are available on the island growing wild, or raised on the farm, none are imported. Obtained locally are bananas, breadfruit, cantaloupe, corn, cucumbers, papayas, squash, string beans, sweet potatoes, taro, watermelon, yams, onions and radishes. The Navy supplies meat, rice, sugar, flour, canned milk and shortening. Except for the patients actually confined to the hospital wards, for whom there is a patient-operated galley, the patients do their own cooking in their respective cook-houses. Supervision is given only for minimum sanitary standards.

On 9 April 1951 there were 112 patients and 4 non-leprous spouses, 2 male and 2 female. The latter occupy the same status in the colony as do the patients, but they receive no treatment except for intermittent illnesses. The patients come from the islands of Yap, Truk, Palau, Ponape, the Marshalls, Saipan, Rota and Guam and range in age from 4 to over 75.

On admission, most of the patients are somewhat undernourished and anemic. A significant number have lower extremity edema. The conditions are caused by the leprosy itself, by intestinal infestation with worms and by inadequate diet. The general conditions of the patients after they been at the leprosarium for several months is considerably improved. Crippling of the extremities and blindness are among the worst results of leprosy.

Tuberculosis has been established in 6 patients now isolated on the T. B. ward. Of 5 deaths at the leprosarium, 4 were caused by tuberculosis. Other conditions requiring hospitalization have been severe plantar ulcers, some with osteomyelitis, lepra reactions and intercurrent non-related illnesses.

There have been 5 babies born in the leprosarium. All were removed from their mothers and the leprosarium at birth and later sent to non-leprous relatives.

Treatment. The treatment routines are patterned after those used in Carville. To date, the treatment of choice in leprosy is the sulfone series of drugs. Over 40 of the patients receive intravenous promin daily, omitting Sundays and every 4th week. More than 60 are given oral diasone on the same schedule. An experiment was conducted on the use of streptomycin in the treatment of leprosy. It was the clinical impression that the value of streptomycin is definitely less than that of the sulfones. Complications are treated separately. For hand paralysis and contractures a small physiotherapy program has been inaugurated; it is anticipated that tendon transplants will subsequently be done. For foot ulcers, treatment has consisted of supportive and conservative experimental measures, with results thus far being rather disappointing. Lepra reactions are treated symptomatically and by giving intravenous procaine, antihistamines, occasionally discontinuing the sulfone and occasionally giving fuadin intramuscularly. For neuritic reaction, parenteral thiamin is given; sometimes perineural injection of procaine is added. Specific treatment is given for intestinal worm infestation.

Prognosis. Since the advent of the sulfone drugs (Carville, 1941), the prognosis has entirely changed. Previously, the outlook was toward progressive development of deformity and crippling, with usually permanent isolation. The outlook now held is for arrest of progression of the disease within several months of starting sulfone treatment, and for discharge from the place of isolation within 3 to 5 years. Probably some 10 percent of such patients will relapse and will have to repeat the treatment. Trust Territory Regulations require that for discharge from the Tinian Leprosarium as an arrested case

the patient show no evidence of clinical activity of the disease on repeated examinations, and that he have 6 consecutive monthly negative multiple area bacterioscopic examinations of material obtained from tiny skin incisions. The patient and his record are then examined by a board of 3 doctors, who certify as to his noninfectiousness. The first such group of 16 patients have recently been so certified and are awaiting transportation to their home islands. (Lt. G. C. McNeilly, MC, USNR, Officer in Charge, Tinian Leprosarium)

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Retrolental Fibroplasia: The January, 1951, issue of the American Journal of Ophthalmology carries an extensive article by Algernon B. Reese and Frederick C. Blodi in which infant blindness is discussed. Retrolental fibroplasia, an important cause of blindness in infancy, is described by these authors as a "clearcut entity affecting primarily premature infants of low birth weights... The disease has an acute or active phase which subsides at about 3 months of age, and a late or cicatricial stage which follows thereafter. Characteristically the condition is bilateral..." The acute phase is described as clinically recognizable between the 3d and 5th weeks of life, being characterized by dilation of the retinal vessels, hemorrhage, neovascularization over the surface of the retina and vitreous, and transudation. The authors emphasize that spontaneous regression may occur during the early stages of the pathologic process but that when the stage of neovascularization and transudation is reached, spontaneous regression is rare.

Before the cicatricial stage is reached the diagnosis of retrolental fibroplasia may be missed readily by the clinician. In consequence, this late stage which is irreversible and accompanied by serious loss of vision has come to be regarded erroneously by some observers as the typical manifestation in all cases of retrolental fibroplasia. Reese and Blodi point out that many cases of retrolental fibroplasia are known to occur which never progress to this final stage of organization and contracture. The authors illustrate their account of the disease by presenting the pathologic findings in the case of an infant with retrolental fibroplasia who died at the age of 11 weeks. The twin sibling of this child, who survived, is now totally blind and presents in both eyes the late cicatricial changes characteristic of retrolental fibroplasia.

The microscopic findings of the acute stage of retrolental fibroplasia are presented in detail, and are well illustrated by excellent photomicrographs. The angioplastic process in the vitreous, which consists of angiomatous tissue extending from the retina into the vitreous, is considered by the authors as characteristic of the pathologic state in retrolental fibroplasia. The presence of a hemangioma in the right orbit of this patient and of others in various parts of the body, particularly over the region of the head, suggests a relationship between the angioplastic process in the eye and the occurrence of hemangiomas in other parts of the body. With this conception in mind the authors point out

that skin hemangiomas occur in 1 to 2 percent of all full term infants, and in 3 to 10 percent of premature infants. Their own experience indicates that 15 percent of infants with retrolental fibroplasia have skin hemangiomas. It is stated further that only 17 to 20 percent of the cutaneous hemangiomas are apparent in newborn infants at birth, and that 80 to 83 percent become evident between the 1st and 6th weeks of postnatal life. On the basis of these observations the authors express the opinion that the "pathologic development of retrolental fibroplasia is that of an angiomatous process which manifests itself predominantly in the vitreous, and the many newly formed vascular channels are identical histologically with those associated with hemangioma" and that retrolental fibroplasia may represent a manifestation in the affected infant of a generalized angioplastic process.

In the section on therapy the authors stress the need for accurate diagnosis of the process during the active stage, prior to the time when irreversible changes have taken place, and point out that the results of surgical intervention in cases with late cicatricial changes have been disappointing. Since January, 1950, they have been collaborating with W. S. Silverman and R. L. Day of the New York Babies' Hospital, in an investigation of therapy of the acute phase with ACTH. Since retrolental fibroplasia may be primarily a generalized disease of the blood vessels, and since hyperadrenalism inhibits the growth of mesenchymal cells and cortisone specifically inhibits the growth of capillaries, it seemed reasonable to this group of workers that ACTH might halt the vascular overgrowth which marks the beginning of retrolental fibroplasia.

The course of therapy used consists in the administration of 20 to 25 mg. of ACTH daily for a period of 14 days. In 2 instances in which the disease process appeared to be reactivated after cessation of ACTH therapy, a second course of therapy was given. To date 13 babies with early retrolental fibroplasia have been treated in this manner. In each instance the retrolental process was arrested, or has regressed. Of 8 infants with progressive retrolental fibroplasia who did not receive ACTH therapy, 3 have complete bilateral membranes, 3 have partial membranes and 2 have small masses of white tissue in the periphery of both fundi. On the basis of their limited experience to date, these workers are encouraged to continue the use of ACTH on an experimental basis. Used in the manner described, no serious side effects of ACTH have been noted in any of the patients.

With the apparent increase in the incidence of infant blindness, many instances of which seem to be on the basis of retrolental fibroplasia, it is recommended that routine ophthalmoscopic examinations be made of all premature infants, especially those with low birth weights, and that such routine examinations be considered obligatory in all premature units. By careful study of these infants, early recognition of the disease process during the acute stage will be possible, and adequate therapy can be instituted before irrevocable changes occur. (J. Pediat., May '51, R. J. Blattner)

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Relapsing Panniculitis (Weber-Christian Disease): A case of relapsing panniculitis (Weber-Christian) disease has been extensively studied for approximately 21 months, from the inception of the disease until the death of the patient. In this paper is outlined the course of the illness in a 30 year old white male with the various studies conducted in an effort to ascertain the cause and the possible lines of therapy which may aid in the management of patients with this disease.

The disease occurs in various grades of severity, and is termed relapsing, febrile, nodular, nonsuppurative panniculitis. During recent years numerous reports have appeared and cases now total 54, of which 7 were studied at autopsy. A similar disease occurring in rabbits has been described.

The characteristic feature of Weber-Christian disease is the occurrence of nodular masses of fat in the subcutaneous tissue. These areas of panniculitis vary from 1 cm. in diameter to large masses, one of which in the present case was 28 by 8 cm. These lesions, which are gradual in development, are often painless but may be somewhat tender. They are firm and movable and may be adherent to the skin, which becomes reddened and violaceous, with roughening and scaling. As the lesion ages, it tends to show central clearing and softening so that a saucer-like appearance or dimpling is observed. The nodules may then either disappear or persist. The skin may remain discolored over the area. These nodular masses are widely distributed, occurring most commonly on the abdomen, breasts, thighs, pectoral regions and arms. They do not become suppurative and are sterile on culture, although they may undergo necrosis and liquefaction.

The appearance of the lesion is associated with fever of a septic type, with daily temperature rises to as high as 105° F., during which the patient complains of weakness, malaise, muscle pains and anorexia. Occasionally, nausea and vomiting are present. Constitutional symptoms may be severe or may be relatively minor over a period of many years. In the present case 2 remissions of short duration occurred during treatment. Christian noted a remission of 3 years' duration in his case. One patient of Miller and Kritzler was free of the disease 27 years after the initial diagnosis.

The disease discloses no seasonal or climatic factors of importance in its incidence and is not infectious. It preponderates in the female and has been observed in persons of every group from 6 months to 70 years, with peak incidence in the group 20 to 40 years of age. Many persons with this disease are overweight at its onset.

Laboratory tests reveal no specific changes which characterize the disease. Results of blood chemical studies have not been abnormal. Liver function has varied somewhat, in the present case being normal, as in numerous other reported cases. The hematological picture also varies. In the present case serious anemia and leukopenia persisted throughout the disease. However,

the hemoglobin content may be normal, and the leukocyte count may be normal or elevated. Differential counts are not disturbed. The bone marrow is not unusual and is reflected in the state of the peripheral blood count.

The clinical picture of Weber-Christian disease, with the characteristic nodules appearing in association with fever and constitutional symptoms, should lead to the diagnosis. Confirmation of the diagnosis is obtained by biopsy of the subcutaneous lesions. The pathological picture is that of an infiltration of the fat with large numbers of lymphocytes and monocytes and occasional polymorphonuclear leukocytes. The process is limited to the panniculus, although infiltration of peritoneal, periadrenal, pericardial, omental and mesenteric fat has been seen. Vascular alterations in the involved fat have been described.

In the 7 autopsies reported, 1 patient died of tuberculosis; 1 of chronic glomerulonephritis; 2 died with intercurrent pyogenic infection, peritonitis and staphylococcic septicemia; 1 died of Hodgkin's disease and 2 died of their disease, with widespread involvement of fat and necrosis and fatty infiltration of the liver. In other fatal cases, as in the present one, autopsy was not performed.

In this patient, therapy with various antimicrobial agents had no influence on the progress of the disease. A course of x-ray therapy, however, produced a remission for almost 2 months. During this period, the temperature returned to normal for the first time in 9 months and the patient experienced considerable subjective improvement. After he again relapsed, a further course of x-ray therapy was without benefit. Some 5 months later, the use of cortisone was instituted with high expectations for success, as it has been suggested that panniculitis may represent a form of collagen disease. However, in 10 days of treatment there was little effect until the 8th day, when the temperature returned to normal. There was no alteration in the size of the lesions. The temperature remained normal for 5 days and then returned to previous levels of 103° F. after the cessation of cortisone therapy. ACTH administered during the last few days prior to death likewise showed no effect. Large amounts of testosterone also failed to modify any aspect of the disease. Antihistaminic therapy with tripelennamine for several weeks did not influence the clinical picture, nor did para-aminobenzoate (potassium). However, extensive trials of cortisone and ACTH may be worthy of consideration.

Supportive therapy with a high protein and high calory diet and vitamin supplementation, including vitamins of the B complex, B_{12} D and C, maintained the patient in reasonably good nutritional status except for the development of seborrhea and polyneuropathy. Administration of large amounts of iron, protein and testosterone failed to influence the anemia. Leukopenia and bone marrow hypoplasia were unaffected. Salicylates were given during the final week of the illness, which may have been an aggravating factor in the terminal mental picture of confusion, restlessness and coma. However, the

patient appeared desperately ill prior to their administration.

The analysis in this case indicates that Weber-Christian disease is not of an infectious origin, although possibility of a viral agent has not been entirely excluded. The possibility of the disease being produced by metabolic derangements occurring in the fat must be entertained. The relationship of this disease to other clinical entities, such as Whipple's disease, erythema nodosum, adiposis dolorosa, lipogranulomas associated with insulin or other injections and scleroderma, is not known, but it is clinically distinct despite histopathological similarities. (A. M. A. Arch. Int. Med., May '51, C. R. Shuman)

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Aureomycin as an Adjunct in the Treatment of Major Burns: Aureomycin should be a valuable aid in the management of major burns. In the extensively burned patient requiring prolonged chemotherapy, the advantages of oral medication over injectable medication are obvious. In the present study, aureomycin has been used both orally and locally in an effort to assay its value as an adjunct in the treatment of major burns.

The general management of major burns is directed simultaneously at the treatment of burn shock and prevention of infection. Immediately upon admission of the patient to the hospital, the burned area is covered over with a sterile dressing to prevent air contamination and all workers are masked to obviate any droplet infection; then strict asepsis is maintained. Shock is treated by: (1) blood transfusion, injections of plasma or normal saline infusions; (2) morphia, administered for the relief of pain and (3) warmth and splinting of the part, if necessary. As soon as the initial shock is overcome and further shock has been prevented, laboratory studies will determine the type and quantity of fluids to be administered parenterally or orally in order to restore the normal volume of circulating fluid, blood cells, electrolytes, and plasma proteins. Hemoconcentration should be looked for early and corrected. Anemia due to thermal burns should be prevented early by blood replacement, determined by the constant and frequent measurement of red cell volume. Hypoproteinemia and avitaminosis should be taken care of at the same time.

For the prevention of further infection, each patient under study has been on oral aureomycin, 500 mg. twice daily, immediately upon admission to the hospital. No invasive infections have occurred in any patient thus treated. At the same time the extent of the burn is traced on a burn chart, using the Lund and Brower chart of surface area estimation. The depth of the burn is determined by sensitivity to pin prick. This method is an accurate guide to the presence of full-thickness destruction of the skin. If this analysis is done carefully upon admission, both the need and the plan for skin restoration can be predetermined.

In the local management of the burn wound, aseptic technique has been vigorously maintained. In the operating room, preliminary cleansing of the burn area is done with pHisoderm. Débridement is limited and blisters are not drained. The burn wound is then treated by the closed method, using a finely meshed petrolatum bandage over the wound on top of which is placed a bulky dry dressing. In burns of the extremities, moderate pressure is used, whereas in burns of the face and trunk, pressure is ineffective and may interfere with respiration. The external dressing is completed with sterile stockinet. The stockinet is cut on the bias, made into 3 or 4 inch rolls, and then autoclaved. This gives an elastic bandage producing an extremely effective pressure dressing.

In the case of hand burns, the hand is placed upon a universal hand splint. In lower extremity burns, immobilization of the foot and knee is obtained by means of a posterior molded plaster of Paris splint. Prolonged elevation of extremity burns has proved of extreme value in limiting postburn edema. Plaster stirrups have been incorporated into the dressing so that elevation within a Balkan frame is possible. However, the patient's cooperation is essential.

The initial dressing is not changed during the first week. The second dressing is done 1 week after the first. Dressings may be performed under anesthesia, if the original examination has revealed full-thickness destruction. The excision of the burn slough and edge-to-edge skin grafting of the defect has been found particularly applicable in burns of the extremities where a tourniquet can be applied to limit blood loss and where the need for complete resurfacing with minimal scar to prevent contractures is evident. Preliminary drainage of the extremity is attained by elevation. On the trunk, the surgical excision may be attended by a considerable loss of blood and operative shock. Adequate blood replacement through one or more portals, with pressure if necessary, is essential.

In lower extremity burns, the excision is usually extended as deep as the zone of reactive hyperemia, often to the level of the fascia. Usually, after the release of the tourniquet, hemostasis is easily effected with fine catgut. In upper extremity burns, however, particularly in the dorsum of the hand where the panniculus of fat is thin, the depth of excision is limited. Considerable bleeding may follow the release of the blood pressure tourniquet, requiring much effort to obtain a dry field so necessary for successful skin grafting. It is felt that a pressure dressing would not be sufficient to prevent hematoma under an extensive weeping graft.

Colebrook has suggested that all burns be kept free of infection by treating patients in specially designed centers. He stated that by utilizing the most

optimum conditions, such as filtered, bacteria-free air, infection need play no role in the burned patient. However, until such facilities are available, infection of the burned area is almost inevitable, especially when the patient is on a ward of a large general hospital. Despite every effort to keep the operative site free of contamination, each case in this series has revealed pathogenic or potentially pathogenic bacteria. Wound cultures of the burn slough before and after excision yielded pathogenic bacteria, both gram-positive and gram-negative, and mostly of the groups sensitive to aureomycin. It was found that the parenteral use of antibiotics does not sterilize burn wounds. Chemical antiseptics, used locally, may impede wound healing and are thus contraindicated. Because of these facts, aureomycin has been applied locally under new skin grafts in 5 patients.

Aureomycin hydrochloride has a pH of approximately 2.5 to 2.9, whereas aureomycin glycinate, as prepared for intravenous injection, has a pH of 7.8 to 8.0. Both forms of the drug were used. Although it was feared that the high acidity of the former compound might interfere with a successful "take" of a skin graft, the low pH of the hydrochloride salt apparently did not interfere with the skin grafting result. The dosage used was chosen arbitrarily and in the first cases was 100 mg. for each 5 square inches of skin graft. With this dosage, the success of skin grafts was 95 percent plus. In a later case, the amount of aureomycin glycinate used was 500 mg. under a graft 6 square inches in area. This case yielded a 100 percent result. In all cases, the drug was placed in solution in the least amount of sterile saline necessary for the area to be grafted and spread under the graft with a syringe.

Aureomycin was not used locally after this one administration. It is feared that its irritant effect would most likely prevent epithelial regeneration on continued use. In a previous experience with sodium sulfadiazine, which is alkaline, treatment of a Thiersch graft donor site failed to heal when the drug was used locally.

Aureomycin hydrochloride has also been used as a spray on body burns in an effort to prepare the granulations for skin grafting where the excision of the slough was inadvisable. In each instance, the application was painful and its use was discontinued. The compound has, however, been used locally on the undisturbed granulation tissue at the time of operation and its use found to be helpful in the "take" of patch grafts. When used under patch grafts there is no way to keep the aureomycin solution from spreading beyond the confines of the graft. Therefore, in the instance of edge-to-edge skin grafting using dermatome grafts, the grafts are first basted accurately to the wound edges and the aureomycin solution is then injected under the grafts.

No effort has been made in this study to compare the effectiveness of aureomycin with other antibiotics or other chemotherapeutic agents for use as an aid in the management of major burns. However, it has been rather conclusively demonstrated that aureomycin has a place in the management of major

burns. It is recommended that the drug be used orally to reduce the likelihood of systemic infection, and locally, at the time of skin grafting, to aid in the "take" of the graft. (Surgery, May '51, L. T. Wright et al)

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Local Cortisone Acetate Therapy in Congenital Syphilitic Interstitial Keratitis: This is a preliminary report on 9 cases of interstitial keratitis due to congenital syphilis in which cortisone acetate was used locally as an eye drop in conjunction with intramuscular injections of procaine penicillin in oil. The cortisone acetate was prepared in a 1:4 dilution with normal saline solution and was used as an eye drop, 2 drops being instilled locally in each eye every hour during the waking hours. The treatment was started at 6 a.m. and was given hourly, with the last medication at 10 p.m., for a period of 10 days. In addition to the cortisone, each patient received 600,000 units of procaine penicillin in oil with aluminum monostearate intramuscularly daily for 12 days. In the daily observation of these patients improvement was usually noted after the first 24 hours.

It was found that local cortisone acetate therapy has a pronounced therapeutic effect with rapid improvement in early cases of congenital syphilitic interstitial keratitis. This improvement is usually evident in about 24 hours after cortisone therapy has been started. The therapy can also be used successfully in cases of recurrence. In general, the use of cortisone may be substituted for fever therapy in the treatment of interstitial keratitis both in the acute case and in the acute recurrent treated case. In addition, there are none of the dangers or discomforts associated with fever therapy. The local instillation of cortisone is practically painless. Since patients are not confined to bed during this treatment, it could be used to advantage on an outpatient basis, with some individual instilling the drops in the eyes.

The medication can be used on persons in any age group, and there are no definite contraindications to local cortisone therapy in comparison with the parenteral use of cortisone. Undesirable side effects can occur in the parenteral use, and large amounts would have to be used parenterally in order to effect the eye changes. The cost of local cortisone therapy is, therefore, much less than the cost of the oral or parenteral type of cortisone administration.

In 4 of the 9 cases, there were typical acute findings of interstitial keratitis as evidenced by vascularity of the cornea, brush or arcade formation, and cellular infiltration. These cases showed very satisfactory and rapid response to cortisone.

In 3 cases which were less acute and which showed thickened corneas with sclerosing changes of the posterior layers, there was a definite decrease of cloudiness or opacities and a clearing of symptoms. In 2 cases the

symptoms were relieved, but there was evidently no effect on the opacities. These cases were of long duration and scarring of the cornea was present.

It was thus seen that cases of longer duration derived less benefit than did the early acute cases. Close follow-ups on the patient must be carried out with instructions to return at 3 month intervals for checkup, and to return immediately if the symptoms return. It is possible for symptoms to return after several weeks from the time the drug has been withdrawn. (J. Ven. Dis. Inform., May '51, W. G. Simpson et al)

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An Evaluation of Recent Developments in Caries Control: Research in the past 2 years has improved the understanding of the effectiveness of several caries controlprocedures. The methods that have been given major attention have been classified as (1) those for which sufficient evidence has accumulated to indicate that they are acceptable; (2) those for which there is evidence for their usefulness but further research is necessary; (3) those methods labeled unacceptable by experience and research.

In the author's opinion the most effective way of controlling dental caries is through conscientious reduction in sugar consumption. Evidence has accumulated indicting sugar as a major culprit in the production of cavities. All of the studies in which caries has been produced in experimental animals have used diets containing readily fermentable carbohydrates. An important study being done by the Notre Dame University and the Zoller Dental Clinic of the University of Chicago, should provide specific information about the role of carbohydrates and acidogenic bacteria in caries production. Another method on an accepted basis is the cleansing of the mouth immediately after eating. There is good laboratory evidence that the maximum production of acid occurs within 5 minutes to a half hour following the ingestion of readily fermentable carbohydrates. If fermentable material can be removed from the mouth before the chemical reaction occurs, caries activity should be reduced. A 3d procedure for reducing carious activity, that has received general acceptance, is the topical application of a 2 percent sodium fluoride solution to the clean dry tooth surface. Evidence has accumulated from studies by different investigators indicating a caries reduction of approximately 40 percent through this procedure. The simplest method suggested for reducing caries activity is the fluoridation of drinking water. Surveys made by the U. S. P. H. Service and others indicate that children residing in areas where the drinking water contains approximately 1 part per million of fluorides have about a 60 percent lower caries experience rate. About 6 times as many children in those communities show no dental caries experience as do those in areas where the drinking water is fluoride free and there is a decrease of 75 percent in the loss of permanent molars. The fluoridation of drinking water is under investigation in many communities, but it will be necessary to continue the various studies for some years in order to obtain desired information. Other methods

considered promising are: (a) the tooth impregnation technic advocated by Dr. Gottlieb, consisting of a 20 percent solution of potassium ferrocyanide used to precipitate a 40 percent solution of zinc chloride previously applied to the clean dry tooth surface; this method is caustic, discoloring and time consuming; (b) the use of ammoniated dentifrices; (c) the use of a penicillin dentifrice; however, the possibility of penicillin sensitivity and the production of penicillin-resistant organisms must be carefully studied and considered; (d) the use of a chlorophyll dentifrice.

Methods considered unacceptable are: (a) calcium therapy; (b) vitamin therapy; (c) fluoride tablets; (d) synthetic vitamin K and (e) glyceric aldehyde. (Oral Surg., Oral Med. & Oral Path., April '51, R. G. Kesel)

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Subcutaneous Urography - Description of a New Method Utilizing 70 Percent Urokon and Hyaluronidase: Excretory urography is of particular value in visualizing the urinary tract of infants and small children where the retrograde catheterization of the ureters is undesirable or impossible. Intravenous administration of contrast media to infants is at best a difficult procedure even in experienced hands. To overcome this difficulty a variety of methods have been advocated. In view of favorable reports on the intravenous use of Urokon, the author felt that an evaluation of the drug in subcutaneous urography was indicated.

The purpose of the investigation was to evaluate a 70 percent solution of Urokon administered subcutaneously in conjunction with hyaluronidase and its ability to produce satisfactory pyelograms. Urokon is the sodium salt of 3-acetylamino-2-4-6-tri-iodobenzoic acid. It is a white crystalline powder soluble in water in concentrations as high as 70 percent. The drug contains 65.8 percent iodine per molecule. The 70 percent solution used in this study was buffered to pH 7 by the manufacturer.

Subcutaneous pyelograms were done on 25 unselected infants, all of whom were less than 12 months of age. The pyelograms were considered sufficient for diagnosis in 17 infants and were poor or insufficient for diagnosis in 8 infants.

The difficulty of preparation for urography of these small patients constituted a major problem. Laxatives were found to be of little value as well as being poorly tolerated. The period of dehydration, applicable in older children and adults, can produce serious alterations in the chemistry of the sick infant, at times rendering the practice dangerous. The authors have given a small enema the evening before and again on the morning of the procedure. Sedation minimizes the excitement and subsequent crying. Elixir of phenobarbital is used.

Following the preparation outlined the child is taken to the x-ray department and a preliminary flat plate of the abdomen is made. This first plate is seen prior to the injection of the dye. An ampule of commercial hyaluronidase is diluted to 2 cc. with normal saline. One cc. of this dilution is injected into the subcutaneous tissue of the lateral surface of both upper thighs. Immediately following the initial injection, Urokon 70 percent, 0.5 Gm/Kg., warmed to body temperature, is injected into the area prepared with the hyaluronidase.

The exposure of films following injection is an individual problem. Customarily, however, the first plate is exposed at approximately 20 minutes after injection. The plate is arranged so that the injected area of the thighs appears on the film. Once the dye has made its appearance in the kidneys a feeding of 3 to 4 ounces of milk is given as rapidly as possible and a film exposed immediately after the ingestion of the milk. The accidental discovery by Matthei that a stomach filled with milk could serve as a window for visualization of the kidneys has been a notable contribution. The administration of the milk feeding must be delayed until the dye can be visualized in the kidneys; otherwise a feeding given at the time of injection will be evacuated by the stomach.

This method has given good results in visualizing kidneys previously obscured by gas shadows. The remaining films are then exposed as in excretory urography by any other method.

In 68 percent of the cases adequate visualization of the kidneys was noted. There was no evidence of any sensitivity to 70 percent Urokon and tissue reaction, both clinical and experimental, was minimal. The average appearance time of the dye was 45 minutes using hyaluronidase and 60 minutes when the drug was not used.

Subcutaneous urography will not displace intravenous or retrograde urography. However, it does offer a satisfactory method of visualizing the kidneys where other methods are contraindicated or impossible. (Urol. & Cutan. Rev., April '51, J. E. Byrne & W. F. Melick)

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Hospitals and Dispensaries: During the month of February 1951 there was an average of 22,466 patients of all types in naval hospitals, representing an increase of 516 patients, or only 2 percent from the 21,950 patients reported for the previous month. The hospital patient load has increased gradually and steadily since the beginning of the Korean situation. The factors of hostilities, partial mobilization, and increased morbidity, particularly the respiratory ailments, have all tended to increase the patient census of naval hospitals.

Concurrent with the increasing hospital patient census it is of general interest at this time to note the distribution of the hospital patient population.

During July 1950, 3 percent of all hospital patients were overseas. Shortly thereafter, in line with the opening of the hospital in Yokosuka, Japan and the increase in combat casualties, the number of patients in noncontinental medical facilities began to increase and in December 1950, they composed 21 percent of all patients in naval hospitals. Thereafter, beginning with January 1951 the picture has reversed itself. In January, 13 percent of the hospital patients were overseas and in February, only 11 percent. The explanation of this reversed trend is probably the decreasing number of combat casualties remaining on the patient census and their rapid evacuation to the continental hospitals.

Along with the increase in Navy and Marine Corps population since Korean hostilities began, an upward trend in the number of active-duty hospital patients became evident, increasing from 7,397 patients in June 1950 to 17,140 in February 1951. Meanwhile, as beds were reallocated to care for greater numbers of active-duty personnel of the Navy and Marine Corps, the supernumerary patients were gradually redistributed to Veterans Administration facilities, Army and Air Force medical activities, and dependents to civilian hospitals. (Stat. Navy Med., May '51)

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Dependents, 4th Quarter 1950: The reports received during the 4th quarter 1950 indicate that 469,371 outpatient visits were recorded in naval medical treatment activities for eligible dependents of members of the Armed Forces of the United States. It must be remembered, however, that this figure in no way represents the number of dependents treated but more nearly indicates the number of treatments given, since these persons could logically have visited more than 1 department or received more than 1 treatment in a department in the course of a single day. The total number of dependent visits to the outpatient departments, which increased 11 percent from the 423,157 visits reported during the previous quarter, showed increases in each department visited. Of the 430,326 outpatient visits to continental activities, 253,501 or 59 percent were reported by hospitals and the remaining 176,825 by non-hospital medical department activities. In contrast, noncontinental facilities which reported 39,045 dependent visits, indicated that 9,538 or 24 percent of the visits were to hospitals, as compared to 76 percent which were outpatient calls to other activities. In the continental facilities, 4 departments (general medicine, obstetrics, pediatrics and inoculations) were responsible for 68 percent of the visits by dependents during the 4th quarter. In the noncontinental activities, 73 percent of the visits were made to these 4 departments. However, in the noncontinental outpatient departments a greater proportion of the total visits were for general medical care than in continental activities, 24 percent as compared to 14 percent.

During the course of dependent visits to medical facilities of the Navy during the quarter, 319,180 special examinations were given. For every 10

outpatient visits, 7 special examinations of one type or another were made. Laboratory examinations were responsible for 85 percent and both basal metabolism tests and electrocardiographic examinations accounted for 2 percent. Approximately 73 percent of the special examinations were accomplished at naval hospitals.

Dependents admitted to hospitals, naval and civilian (attended by Navy medical personnel) are reported under 4 classifications - medicine, obstetrics, pediatrics and surgery. A total of 21,078 dependents were admitted to such hospitals during the quarter, an increase of 15 percent over the number admitted during the previous 3 month period. The distribution of hospital admissions by types of service was as follows: obstetrics, 43 percent; surgery of all types, 27 percent; pediatrics, 16 percent and general medicine, 14 percent. Of the dependents who received hospital care in noncontinental areas, more than 1 out of 3 were obstetrical cases and about 1 out of 6 general medicine patients. In contrast, almost one-half of the dependents admitted to continental hospitals were for obstetrics and 1 out of 7 were for general medicine. About 43 percent of the surgical procedures were for gynecological conditions.

Only those cases attended by Navy medical officers are included in these summaries. During the 4th quarter of 1950 there were a total of 7,537 deliveries reported, an increase of about 10 percent over the previous quarter. Of the deliveries reported during this period, 53 percent were spontaneous, 44 percent operative, and only 3 percent were caesarean section. The 362 deaths reported, an 18 percent increase over the 3d quarter, were distributed in the following manner; adults, 18 percent; children, 11 percent; and the remaining 70 percent were newborn infants. In 19 out of 20 instances, newborn deaths were reported as either premature or stillborn. (Stat. Navy Med., May'51)

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Dangers Involved in Dyes, Cosmetics and Permanent Wave Lotions Applied to Hair and Scalp: The author reports having seen, in recent years, many barbers and beauty shop operators suffering from occupational dermatitides. These eruptions are due not to one sensitivity but a combination of factors. The Industrial Hygiene Newsletter mentions that 3 hairdressers exposed to thioglycolic acid have been studied. Interest in this subject continues because of the case of a hairdresser with aplastic anemia, believed to be of chemical origin, which has been followed carefully for the last 2 years.

Apparently, the trend is to do away with barber shops and beauty parlors, for nowadays all their arts can be practiced at home. Hence most of the untoward reactions from scalp cosmetics result from carelessness, overuse or misuse of the product, due to failure to apply the agent according to directions.

The dangerous agents might be classed as mechanical or chemical. The use of metal clips, plastic combs and brushes tends to break the hair. Metals cause dermatitides, especially in the occipital areas. Although most dangerous or irritating chemicals have been removed by the industry, it is impossible to remove all the sensitizing substances. There will always be the hypersensitive person susceptible to a specifically active substance. These sensitizers are numerous--the essential oils in bay rum, the synthetic perfumes in brilliantine, the various oils and gum resins in hair creams and curling applications. Many of the scalp lotions and tonics used by men contain irritants and sensitizers, such as, pilocarpine, cantharides, quinine, acetic acid, camphor, capsicum,betanaphthol,resorcinol, chloral hydrate, rosemary oil and bergamot oil. Shampoos contain perfume and sulfonated mixtures which may sensitize a susceptible person. The coconut oil shampoos are perfumed with several stable synthetic and essential oils. Hair dyes and so-called rinses are the oldest but still the most dangerous hazards of the hairdresser's trade. Copper, lead, silver, pyrogallol, iron and potassium permanganate have been replaced by paraphenylenediamine and similar compounds. The introduction of the cold permanent wave processes has created the most recent hazard. It can cause local skin irritation and is still under suspicion as being able to produce systemic effect due to thioglycolic acid.

Patch tests with thioglycerol and ammonium thioglycolate lotions were done on 223 subjects to observe the irritating and sensitizing action of these chemicals. With the exception of 1 male, the subjects were women ranging from 18 to 34 years of age. All were healthy persons with normal skin. History of allergic tendencies or skin disturbance was taken before the tests were made. Sixty-five of the group gave a history of previous dermatitis due to plants, whereas 21 had had some other type of cutaneous disturbance. It was found that 101 had had previous exposure to cold wave processes.

In the original test there were 20 reactions to the thioglycerol lotion. One immediate reaction subsided and was followed by a delayed reaction. There were 24 reactions to the ammonium thioglycolate lotion. Eight subjects reacted to both substances. Two refused to submit to further tests because of the severe reaction.

Retests were done on 213 subjects and resulted in 76 reactions to the thioglycerol lotion. These included 36 immediate, 7 immediate followed by delayed and 33 delayed reactions. There were 26 reactions to the ammonium thioglycolate, 25 being immediate and 1 immediate followed by a delayed reaction. Sixteen subjects retested reacted to both lotions. The so-called delayed reactions occurred 6 to 9 days after the patches were applied. They developed rapidly and consisted in solid, round, raised and extremely itchy lesions measuring about twice the size of the patch applied. One of the subjects who acquired such a reaction to thioglycerol submitted to retesting with this substance and showed a severe vesicular and exudative reaction.

It is apparent that both of these solutions have an irritating plus a sensitizing action. The thioglycerol lotion, however, is a far more potent sensitizer than the ammonium thioglycolate lotion. In general, the reactions to the former were severer, more prolonged and more constant than those with the ammonium thioglycolate. (A. M. A. Arch. Dermat. & Syph., May '51, J. G. Downing)

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Results of Reimplantation of Posterior Teeth After Root Filling: Reimplantation is warranted when a valuable tooth cannot be saved by the usual conservative methods.

Each individual tooth has an important function and therefore should be preserved if preservation is at all possible. Reimplantation of front or premolar teeth should be tried only in cases of loose teeth following accidents. If the tooth is replanted within about half an hour, the periodontal membrane is probably still vital and the chances of a successful result are enhanced. To preserve a molar tooth is more important for a patient with a full complement of teeth, than for a patient wearing a prosthetic appliance. The procedure is indicated for young patients with good hygiene who have lost but 1 or 2 teeth, to avoid the necessity of a partial denture. In such cases the reimplantation of a pillar tooth and the insertion of a fixed bridge are very useful and effective. It is absolutely indicated if the tooth concerned is the only effective support for an obturator, or sometimes as provisional treatment in cases of fractures.

The age of the patient is very important. All individuals with an exudative diathesis, blood dyscrasias, hormonal disturbances, gingivitis, pyorrhea or whose tolerance to infection is diminished should be excluded. The tooth, the reimplantation of which is planned, should be examined anatomically. Though teeth with diverging roots have a better bone support they cannot be reimplanted if the roots are extremely diverging or declining or thickened at their apices. Other contraindications are those cases in which the reintroduction of the tooth is mechanically impossible.

In the absence of contraindications the reimplantation has no disadvantages. Neither the dental surgeon nor the patient should overlook the fact that reimplantation is preceded by extraction of the tooth. No promise should be made concerning the success of the operation, since the best plan may fail at the moment of the extraction if the tooth fractures or if the alveolus is severely damaged. This accident sometimes cannot be prevented, even if every precaution has been taken. It is possible that the reattachment of the replanted tooth may fail because the resorbing alveolar bone will give no support to the tooth. There are cases in which suppuration takes place after the operation. It is believed, however, that the majority of unfavorable results are due to lack of proper care in the selection of cases. The great advantage of reimplantation lies in the fact that the whole treatment can be completed within 1 hour, which

is much less than the treatment of a sterile extirpation of a pulp in the case of a molar tooth.

Extraction should be followed by careful excochleation, limited to the region of the apex. After the wound has been dried it must be examined to ascertain whether the wall of the alveolus and the septum have not been damaged. If the body parts have been damaged, the injured particles are removed and the chances of a successful operation must be reconsidered. If the injury has involved the septum, or if a large part of the alveolar wall was removed, it is wise to desist from the operation. The tooth is washed in a physiologic salt solution of body temperature. Then it is seized with a sterile swab, its apex removed, and the root canal or canals filled by a retrograde approach. Occasionally, the tooth may be affected by caries, in which case the tooth should be filled before it is reimplanted. Before the reimplantation, the wound cavity is washed with physiologic salt solution to remove the clot formed after the extraction; on replacing the tooth only a slight pressure should be exerted. The gingiva is replaced upon the tooth by delicate stroking movements of the fingers. If a solitary tooth is to be reimplanted it is advisable to fix it to the nearest tooth by an eight-shaped metal wire. The bridge or an acrylic splint can be made previously or afterward. It is advantageous to make it previously because such a bridge or splint is the best means of fixation if it is put in place immediately after reimplantation. Occationally, an old bridge can be used for the same purpose. (Oral Surg., Oral Med. & Oral Path., May '51, E. J. Perint)

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Special Course in Sanitary Science: Applications are desired from Regular Navy MSC and HC officers for the Special Course in Sanitary Science for Military Personnel to be given at the University of California, Berkeley, California, from 12 September 1951 through February 1952.

The course includes one semester of academic instruction in environmental sanitation, rodent control, and venereal disease control and a two-weeks period of practical field application under supervision of the University faculty.

Letter requests to attend the course should be forwarded to the Chief of the Bureau of Medicine and Surgery; Attention (Code 345) prior to 1 August 1951. (Professional Div., BuMed)

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Selected Research Reports

Field Trial of Shigella Flexneri III Vaccine. VI. Serum Mouse Protective Studies: As noted in the first report of this series, the ultimate test of the effectiveness of Shigella flexneri III vaccines in protecting personnel against the homologous infection might be provided by the occurrence of an epidemic in a population composed of suitably distributed inoculated and control groups. Because the ships used in the study were decommissioned before sufficient time had elapsed for the epidemics to appear, evaluation of the vaccines employed has been based upon laboratory studies of materials collected aboard the ships and statistical analyses of resulting data. In this connection, agglutination tests were conducted with paired serums from 3,576 subjects and coproantibody studies made with 2,444 specimens.

For many years, the passive mouse protection test has been employed in assaying the antibody content of various serums; it has been found, moreover, to be more sensitive than the agglutination test for differentiating degrees of immune response to Shigella immunization in human subjects. In view of these circumstances, it was believed that valuable information could be obtained by using the serum mouse protective test in estimating the efficacy of the vaccines employed in the field trial. This report is concerned, therefore, with the results of such tests conducted with serums secured from 633 officers and men aboard 5 cruisers before inoculation with Shigella flexneri III vaccines and from different groups at 8 postinoculation intervals; a control group that received placebos only was included. Statistical evaluations of the mouse protective data were made to obtain information regarding the efficacy of the vaccines employed.

Statistically significant increases in protective power ranging between 9.2 and 10.5 were observed in serums from subjects who had received primary subcutaneous inoculations of S. Flexneri III vaccine. Orally administered S. flexneri III vaccine failed to elicit marked humoral antibody response. The peak of protective antibody production following parenteral immunization was reached approximately 3 weeks after the last injection in the initial course of inoculations; a significant level was maintained for at least 6 months.

It was observed that prior epidemiologic experiences of the subjects influenced their antibody responses to artificial stimulation by S. flexneri III vaccines. Men without any known previous natural exposure to the organism responded to the parenteral vaccine with greater increases in protective antibody than did individuals who had been present in an epidemic; individuals who had been present but were without reported clinical symptoms, responded to inoculations significantly better than those who had been acutely ill during an outbreak. It is believed that these differences were due to humoral antibody levels established by natural exposure to the organism and that artificial exposure by vaccination served only to increase the mouse protective power of serums to a more or less constant maximum.

From the observations described, it appears that the parenterally administered S. flexneri III vaccine induced the production of protective antibody in susceptible personnel to a degree comparable with that found in men who had recently experienced the natural infection; records indicate that individuals who have convalesced from the disease rarely suffer second attacks due to the same type of Shigella. (Project NM 005 048.04.11, NMRI, NNMC, Bethesda, Md., L. A. Barnes, Cdr., MSC, USN, et al)

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Field Trial of Shigella Flexneri III Vaccine, VII. Studies on Asymptomatic Carriers of the Organism: Bacteriological and clinical studies were made of men who had previously been detected as asymptomatic carriers of S. flexneri III. Upon completion of these studies, those men found still to be carriers were given a course of treatment totaling 15 Gm. of chloramphenicol to eradicate the organisms.

From a group of 24 men who had harbored S. flexneri III over a year prior to the current studies, 18 were found to be no longer carriers. The duration of infection in the latter group was estimated to have been between 0 and 36 months. During a preliminary series of 60 successive rectal swab cultures 6 of the 24 men were found still to be excreting the organisms. The duration of infection in this smaller group was found to vary between 20 and 56 months. Wide variations in intermittency of recovering the organisms were observed with maximum positive and negative phases of 20 and not less than 33 specimens respectively. The recovery rate of S. flexneri III from the 6 men was 1 out of every 2.2 specimens examined.

Attempts to locate foci of infection were unsuccessful. The bowel mucosa in each case was normal; only one positive culture of doubtful origin was obtained through the sigmoidoscope from the mucosa at 24 cm., and no Shigella were found in bile specimens examined. Of possible significance in this connection was the high recovery rate of organisms from rectal swab specimens.

A course of chloramphenicol consisting of 250 mg. every 3 hours around the clock to a total of 15 Gm. was administered to each carrier after completion of the clinical observations. As evidenced by 60 successive negative follow-up rectal swab cultures, it was concluded that the antibiotic therapy was completely effective in eradicating the carrier condition. (Project NM 005 048.04.12, NMRI, NNMC, Bethesda, Md., L. A. Barnes, Cdr., MSC, USN)

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From the Note Book

1. Four Marine Corps veterans, who underwent amputation as a result of Korean fighting, demonstrated their Navy manufactured artificial limbs before a Congressional group in Washington on 10 May 1951. The appliances are manufactured at the Oakland Amputee Center, USNH, Oakland, Calif., and are individually fitted to the requirements of each amputee. Also demonstrated were: the U. S. Air Force Henachke Mauch hydraulic knee; Stewart-Vickers hydraulic AK knee; U. S. Army APRL hand and hook; Northrop hook; U. S. Army and Navy cineplastic prosthesis and International Business Machines Corporation electric arm. (BuMed PIO, 10 May '51)

2. Research sponsored by the Physiology Branch, ONR, has resulted in a breathing device which warms the inhaled air and is useful in Arctic weather, a new method by which practically all the ACTH can be extracted from the pituitary gland, and the treatment of frostbite by use of rutin, anticoagulants and antihistaminics. (Bio Sciences Group, ONR)

3. "The Scientists' Attitude Toward Government Employment" is discussed in Science, 4 May 1951, by C. D. Ahlberg and J. C. Honey.

4. Major General George E. Armstrong, USA, has been nominated to relieve Major General R. W. Bliss, USA, as Surgeon General of the Army. The change is scheduled to occur 1 June 1951. (Washington News, J. A. M. A., 12 May '51)

5. The Virginia Department of Health reports the fatal poisoning of 3 children, who had ingested water hemlock. Three other children were affected, but recovered. The 6 children, all between 4 and 13 years of age, were reported to have mistaken this plant for wild carrot, which is considered to be edible. The roots of the plant contain the highest concentration of the active principle, coniine, an alkaloid which produces motor paralysis. (FSA, PHS, National Office of Vital Statistics, 19 May '51)

6. The treatment of infantile diarrhea with a new combination of antibiotics (neobacin) appears in Journal of Pediatrics, May 1951, E. R. Kadison and M. P. Borovsky.

7. The USAF School of Aviation Medicine will initiate this year a research project to determine whether the anti-malarial drug, chloroquine, produces any visual disturbances which might interfere with the duties of pilots or other flying personnel. (U. S. Air Force Medical Service Digest, May '51)

8. In 1949, deaths from all forms of tuberculosis are estimated to have numbered 39,000, a 9 percent lower rate than for 1948, after allowing for changes in classification procedures. A further decrease of approximately 15

percent appears to have occurred in 1950. (Pub. Health Rep., 4 May '51, E. H. Halpin & O. D. Turner)

9. Specific proposals looking toward organization of the Joint Commission on Accreditation of Hospitals have now been agreed upon by the interim committee on standardization representing the American Medical Association, the American College of Surgeons, the American College of Physicians, and the American Hospital Association. The proposals have already been approved by the Board of Regents of the American College of Physicians and will be dealt with in coming sessions by official bodies of the other 3 organizations. (Modern Hospital, May '51, "Looking Forward")

10. An outbreak of jungle yellow fever in the state of Goias in central Brazil, which began in December 1950, has been reported by WHO; by the end of January an estimated 2,100 cases with about 420 deaths were reported. The area has always been free of Aedes aegypti. Many immigrants from other parts of Brazil and from Italy have entered the area in the past 3 years; few had been vaccinated against yellow fever. Intensive vaccination of the population is being done, even though the outbreak is declining. (FSA, PHS, Office of Vital Statistics, May '51)

11. "Photographs, Infrared Photographs and Transillumination Diagrams Illustrating Diagnosis and Treatment of the Cervix Uteri" appears in the American Journal of Surgery, May 1951, L. R. Thompson.

12. "Observations on Salivary Lactobacillus Counts for a Period Before and After Topical Applications of 2 Percent Sodium Fluoride" are discussed in Journal of Dental Research, April 1951, by P. C. Kitchin et al.

13. A kit of audio-visual materials for patient education in diabetes is now available. It requires the use of a 33-1/3 rpm record player and a 35 mm. film projector. The kit can be purchased from Health Publications Institute, Inc., 216 N. Dawson Street, Raleigh, N. C., and may be borrowed for short-term loan from the Film Library, Communicable Disease Center, Public Health Service, Atlanta, Ga. (FSA, PHS, May '51)

14. "First Aid Treatment by the Physician in Treating Eye Emergencies in Industry" is discussed by A. A. Knapp. (J. A. M. A., 5 May '51)

15. "A Case of Generalized Torulosis with Bone Involvement" is discussed in A. M. A. Archives of Internal Medicine, May 1951, by M. F. Wiener.

16. "Facial Development in Mongolism" is discussed in the American Journal of Orthodontics, May 1951, by S. D. Gosman.

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List of Recent Reports Issued by Naval Medical Research Activities:

Naval Medical Research Institute, NNMC, Bethesda, Maryland.

On Lattice Theories of the Liquid State, NM 000 018.06.04 , 12 December 1950.

The Hemorrhagic Syndrome of Acute Ionizing Radiation Illness Produced in Goats and Swine by Exposure to the Atomic Bomb at Bikini, 1946, NM 006 012.04.33, 21 December 1950.

Oral Manifestations of Ionizing Radiation, NM 006 012.04.34, 29 December 1950.

Ineffectiveness of Cortisone Therapy in Mice Infected with Japanese B Encephalitis, and the Adverse Effect of High Dosages, NM 007 081.02.10, 9 March 1951.

Concerning the Dependence of the Surface Energy and Surface Tension of Spherical Drops and Bubbles on Radius, NM 000 018.06.05, 14 March 1951.

Naval Medical Research Unit No. 4, ADCOM, USNTC, Great Lakes, Illinois.

Experimental Studies on Streptococcal Infection and Rheumatic Fever, NM 005 051.03.06, 12 March 1951.

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Retirement Credits for Reserve MO's Who Attend AMA Meetings: Medical Officers in the Army, Navy, or Air Force Reserve will attain retirement credit by attending the 2 sessions of the Military Medical Section of the A.M.A. Scientific Assembly in Atlantic City, N. J., 14 and 15 June 1951. The minimum attendance required for 1 retirement credit point is 2 hours at each session of the A.M.A. Military Medical Section, which will meet as a separate group and will consider problems directly related to military medicine. (P. I.O. Department of Defense, 17 May 1951)

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JOINT LETTER

BUMED CIRCULAR LETTER 51-75

Department of the Army, the Navy, and the Air Force

18 April 1951

MEDICAL SERVICE

JOINT UTILIZATION OF ARMED FORCES MEDICAL LABORATORIES AND EPIDEMIC DISEASE CONTROL UNITS

AR 40-441, BuMed Cir Ltr No. 50-113, and AFR 160-62, 25 September 1950, are changed as follows:

5. List of Units, their location and military control:

UNIT	UNDER MILITARY CONTROL OF
* * *	* * *
NAVY:	
* * *	* * *
U. S. Navy Malaria and Mosquito Control Unit No. 1 Naval Air Station Jacksonville, Florida	Commandant 6th Naval District Charleston, South Carolina

By order of the Secretaries of the Army, the Navy, and the Air Force:

Official:
Edward F. Witsell
Major General, USA
The Adjutant General

J. Lawton Collins
Chief of Staff, United States Army

Official:
C. C. Hartman
Deputy Chief of Naval Operations (Administration)

H. L. Pugh
Chief of the Bureau of Medicine and Surgery, Department of the Navy

Official:
K. E. Thiebaud
Colonel, USAF
Air Adjutant General

Hoyt S. Vandenberg
Chief of Staff, United States Air Force

BuMed Circular Letter 51-75 will not be printed in the Navy Department Bulletin.

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BUMED CIRCULAR LETTER 51-76 4 May 1951

From: Chief, Bureau of Medicine and Surgery
To: All Ships and Stations

Subj: Conservation of Sutures

1. There will be a definite shortage of suitable raw material (sheep gut casings) from which catgut sutures are prepared if current usage rates continue.

2. All users of catgut sutures are enjoined to adopt all measures compatible with each particular requirement for suture material which will reduce the demand for catgut.

3. Suggested measures for conservation of catgut are:

(a) Substitute other material where appropriate.

(b) Use the smallest size which will satisfactorily serve the purpose for which used.

(c) Open as few different sizes or types as practical for any one operation in order to avoid waste of partially used tubes.

(d) Use scraps for practice and instruction.

4. There is no intent at this time to ration or otherwise disturb the supply of catgut sutures as requisitioned. Conservation measures by each user and the strict avoidence of hoarding and over-ordering will in all likelihood make restrictions unnecessary.

H. L. Pugh

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JOINT LETTER

BUMED CIRCULAR LETTER 51-77 7 May 1951

From: Chief of Bureau of Medicine and Surgery
Chief of Bureau of Naval Personnel

To: All Ships and Stations
(Action - All Shore Stations)

Subj: Naval Reservists, officer and enlisted; physical fitness for orders to extended active service

Ref: (a) Paragraph 2118 Manual Medical Department (1945 edition)
(b) Paragraph 2118.2 Manual Medical Department (1945 edition)
(c) Paragraph 2118.3 Manual Medical Department (1945 edition)
(d) AlStaCon 201948Z of July 1950

1. It is noted that many Naval Reserve officer and enlisted personnel are being accepted, by medical officers in the field, as physically qualified for extended active service, with or without conditional waivers, even though they cannot reasonably be expected to perform unlimited active duty. The need at present is for reserve personnel who can perform duty at sea or on foreign shore for a normal tour. Those who require major surgical treatment or who are likely to need extensive medical study or treatment are to be considered not physically qualified for active military service pending review of the records in each case in the Navy Department.

2. Naval reservists in reporting for extended active duty are required to meet the same physical standards as other personnel of similar rank or rating who enter into active service (reference (a)). Personnel who do not meet the standards for original appointment, or enlistment, (references (b) and (c)) are not to be accepted for extended active duty unless a conditional waiver is granted in accordance with the provisions of reference (d).

3. Reference (d) was promulgated for the purpose of expediting ordering into active service those Reservists who are physically able to perform unlimited duty, but who present defects or disabilities which require waiver for administrative reasons. The conditional waiver (reference (d)) is not to be recommended or granted in any case where the individual is:

(1) unlikely to be able to perform unlimited duty

(2) in need of further study of major nature (other than chest x-ray or serology testing)

(3) in need of major surgical treatment

(4) suffering from, or presents a bonafide history of, such recurrent or progressive, and potentially disabling diseases as arthritis, malignancy, joint derangement (hip, knee, shoulder), asthma, bronchiectasis,

pulmonary tuberculosis (re-infection type), psychoneuroses or psychoses, hypertension, especially with diastolic pressure above 95 millimeters of mercury, peptic ulcer or ulcerative colitis.

4. In the case of those members where doubt exists as to physical fitness to perform unlimited extended active service, the medical examiners should disqualify the individual physically. However, in unusual circumstances where a waiver, contrary to the above, is believed in the best interest of the Service, a dispatch should be sent to the Bureau of Naval Personnel with the Bureau of Medicine and Surgery and the prospective duty station as information addressees. The dispatch should list full name, rank or rate, serial or file and designator number, and state the nature and degree of disability with recommendation for approval of a waiver. Completed Forms 88 and 89 in all cases should be promptly forwarded to the Bureau of Medicine and Surgery.

H. L. Pugh L. T. Dubose

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JOINT LETTER

BUMED CIRCULAR LETTER 51-78 10 May 1951

From: Chief, Bureau of Medicine and Surgery
Chief of Naval Personnel
Commandant of the Marine Corps

To: All Ships and Stations

Subj: Increase in funeral and burial allowance

Ref: (a) Part III, Chapter 4, Manual Medical Department
(b) Part IV, Chapter 1, Manual Medical Department
(c) Chapter 13, Part B, Volume I, Marine Corps Manual
(d) Chapter 55, Part K, Volume II, Marine Corps Manual
(e) Article C-9802, Bureau of Naval Personnel Manual
(f) BuMed and MarCorps joint letter No. 51-65

1. Effective in cases where services are rendered on or after 1 May 1951, the allowance for expenses incurred for interment in a private cemetery of remains of deceased Navy and Marine Corps personnel (references (a), (c) and (d)) and those civilian employees specified in Paragraph 4130 of reference (b) will be increased from a maximum of $75 to a maximum of $125.

2. Effective the same date a maximum allowance of $75 will be made on expenses incurred for interment in a National or Naval Cemetery. This allowance

will be payable only in those cases where the remains are consigned to a funeral director for services prior to interment and none of the items allowed may duplicate those furnished by the Government.

3. Appropriate corrections shall be made wherever reference to this allowance is made in the Manual of the Medical Department, the Bureau of Naval Personnel Manual, and the Marine Corps Manual. Forms NAVMED HF-61 (Information for Next of Kin Regarding Expenses in Connection With the Preparation, Encasement, Transportation, and Burial of Deceased Members of the Naval Service), and NAVMC-817-SD (Information for Next of Kin Regarding Expenses in Connection with the Preparation, Encasement, Transportation, and Burial of the Remains of Marine Corps Dead) are being revised and a temporary supply will be furnished all Naval activities having a contract for care of the dead. Additional supplies will be available from District Publications and Printing Offices in the immediate future.

4. The foregoing allowances for funeral and burial are separate and distinct from the expenses of preparation and encasement of remains, the maximum amount for which was increased by reference (f) from $200 to $300.

H. L. Pugh L. T. Dubose C. B. Cates

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BUMED CIRCULAR LETTER 51-79 11 May 1951

From: Chief, Bureau of Medicine and Surgery
To: All Naval Hospitals (except Yokosuka)
All Continental Infirmaries and Dispensaries

Subj: Report of Staffing Ratios at Medical Treatment Facilities (DDOMS-3)

Ref: (a) BuMed C/L 50-103 (modified by C/L 50-116)

1. Reference (a) requested that certain information regarding personnel and their duties relating to in-patient care, out-patient care, and other duties be submitted monthly.

2. This report has become an important source of information relating to certain phases of budgetary preparation. Therefore, it is requested that care be taken to ascertain that figures submitted for authorized and assigned personnel in subject report be correct as of the end of the month report date. Furthermore, it is requested that the definitions, as described in reference (a), be followed when allocating the duties among in-patient care, out-patient care, and other duties.

3. The Bureau of the Budget has requested that supplementary information be obtained for the personnel reported as assigned to duties other than in-patient and out patient care. Therefore, it is requested that the following information, on a one-time basis, be reported on an attachment to the subject report submitted as of 31 May 1951.

PERSONNEL ASSIGNED TO DUTIES OTHER THAN IN-PATIENT AND OUT-PATIENT CARE AS REPORTED ON DDOMS-3

Duty Assignment	Type of Personnel		
	Total	Military	Civilian
Total	1		
Research			
Training 2			
Medical Boards (Clinical, Survey, PE, Examining, etc.)			
Preventive Medicine and Sanitation			
Personnel Assigned for Military Convenience			
Other (specify)			

1 Total of personnel reported in column "Other Duties" in paragraph 1 b. of reference (a).

2 Include only those personnel who are not utilized in in-patient or out-patient care while in training.

H. L. Pugh

The above letter will not be printed in the Navy Department Bulletin.

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BUMED CIRCULAR LETTER 51-80 14 May 1951

From: Chief, Bureau of Medicine and Surgery
To: All Ships and Stations

Subj: Pre-embarkation certificates and physical examinations for overseas travel of military dependents in MSTS vessels and MATS planes

Encl: (1) "Pre-embarkation Certificate"; form of

1. In order to expedite authorized travel for military dependents and to assure maximum care of those likely to be ill while embarked, agreement with representatives of the Army and Air Force has been reached on the following procedure for medical processing of such persons travelling in Military Sea Transportation Service vessels and in Military Air Transport Service planes, and is quoted below:

"Accomplishing necessary pre-embarkation processing of dependents will include such physical examination as may be required. All adult dependents will be required to complete within 48 hours of embarkation a certificate, as shown in enclosure (1). These certificates may be reproduced locally. All female personnel submitting a certificate indicating that they are pregnant will be required to support this certificate with another signed by a reputable physician attesting to the period of pregnancy. Physical examinations will be made in the case of those dependents who according to statement made on the certificate have experienced an illness or injury within 60 days, in the case of women who are pregnant or less than 6 months post-partum, and in the case of infants and children under 6 years of age. In each instance the examination will be sufficiently complete to determine the fitness of the individual to undertake the voyage in a passenger status and to detect the presence of an infectious disease. The results of this examination will be recorded on the back of the certificate. Certificates of all persons cleared for travel will be forwarded to the medical officer responsible for the care of such persons during travel. When an infectious condition is found which may spread to other persons aboard ship, or plane, the individual will be withheld from travel until non-infectious. If in the opinion of the examining medical officer, there is no infectious disease present but the physical condition is such that travel may involve serious risk to life or health, the person or responsible parent will be so advised. If the individual desires to proceed after receiving this advice, he will be required to sign a statement attesting that he, having been fully informed of the dangers involved and being of sound mind, elects of his own volition to continue the journey. In such instances every reasonable precaution will be taken to provide a method of transportation and travel in a status that will involve the least hazard with regard to the individual's condition, and a complete medical record of all examinations and treatments will be furnished as soon as possible to the senior medical officer responsible for the care of the individual during travel in order that any special needs of the individual may be provided."

2. For overseas transportation of Navy dependents, this certificate, with physical examination in selected cases, shall replace the routine physical inspection at ports of embarkation. Navy dependents in addition are required by

regulations to submit a medical certificate from a qualified physician made before departure from home. Physical examinations at the port of embarkation in all dependents may be required in special situations such as the presence of communicable disease. The senior medical officer responsible for the care of the individual during travel may require later examinations, irrespective of all prior certificates and examinations, when in his judgment such is necessary for health protection during the voyage.

H. L. Pugh

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BUMED CIRCULAR LETTER 51-81 14 May 1951

From: Chief, Bureau of Medicine and Surgery
To: Commandants, All Naval Districts and River Commands, CLUSA
Commanding Officers, Naval Hospitals, CLUSA

Subj: Early transfer to the Veterans Administration of patients whose return to active duty is improbable

Ref: (a) BUMED C/L 51-69 (BUMED-BUPERS-MARCORPS JOINT LTR of 24 Apr 1951)

1. In view of the policies and directives on which reference (a) is based, it is of the utmost importance that the transfer to Veterans Administration hospitals of those categories of patients described in paragraph 2 of reference (a) be expedited to the maximum possible extent consistent with the welfare of the individual patient.

2. Commanding officers of the hospitals addressed should take steps to ensure that:

a. A clinical board is convened without delay upon the admission of a patient requiring specialized care, whose disability is such as to make return to duty improbable. In all other cases a clinical board should be convened as soon as possible after such condition becomes apparent. This is a departure from the former policy of affording a prolonged period of hospitalization before bringing patients before Physical Evaluation Boards;

b. No unavoidable delay occurs in the processing and forwarding of clinical board reports;

c. Dispatch request for bed designation in a Veterans Administration hospital, as required by paragraph 3 of reference (a), is submitted immediately upon receipt of advice that the Physical Evaluation Board has completed its hearing in each case;

d. Preliminary processing for release from active duty is completed in sufficient time to prevent delay in accomplishing transfer to the designated Veterans Administration hospital.

3. Commandants addressed are requested to ensure that expeditious processing of the cases referred to is accomplished by the Physical Evaluation Boards under their jurisdiction, including priority consideration of these cases to the extent necessary to expedite final disposition.

C. J. Brown
Acting

The above letter will not be printed in the Navy Department Bulletin.

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BUMED CIRCULAR LETTER 51-82 17 May 1951

From: Chief, Bureau of Medicine and Surgery
To: All Naval Activities Having Contract for Care of the Dead (Continental)

Subj: Form NAVMED-61 (Rev. 5-51), Information for next of kin regarding expenses in connection with preparation, encasement, transportation, and burial of deceased members of the naval service

Ref: (a) BuMed-BuPers-MarCorps Joint Letter of 10 May 1951 (BuMed Circular Letter No. 51-78)
(b) Form NAVMED HF-61(1943)

Encl: (1) Temporary supply of Form NAVMED-61 (Rev. 5-51)

1. The issuance of reference (a) and other instructions in the past concerning allowances for funeral and burial of deceased Navy and Marine Corps personnel has caused reference (b) to become obsolete. Accordingly, this form has been revised and there is enclosed herewith a temporary supply of the revised form which shall be used in lieu of reference (b). It is understood that Form NAVMC-817-SD, which is used in cases of deceased Marine Corps personnel is being revised and that a temporary supply will be made available by Headquarters U. S. Marine Corps, within the very near future.

2. Complete revised instructions concerning the care of the dead will be forthcoming within the near future as Chapter 17, Manual of the Medical Department. Upon promulgation of this chapter, it will again be necessary to revise the NAVMED-61. When this revision is made, addressees will be informed and a

supply of the form will be made available from local district printing and publications offices.

H. L. Pugh

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BUMED CIRCULAR LETTER 51-83 18 May 1951

From: Chief, Bureau of Medicine and Surgery
To: Commander, Fleet Logistic Air Wing, Atlantic/Continental
Commander, Fleet Logistic Air Wing, Pacific

Subj: Fleet Logistic Air Wing - Medical Air Evacuation, NavMed-1327 (3-51)

Ref: (a) BuMed ltr BUMED-536:amw A3-1/FF9 of 16 Jan 1951
(b) BuMed ltr BUMED-536:amw A3-2/FF9 of 16 Jan 1951

Encl: (1) Copies of Fleet Logistic Air Wing - Medical Air Evacuation, NavMed 1327 (3-51)

This letter, which will not be printed in the Navy Department Bulletin, contains information and detailed instructions for the preparation and submission of subject form (Nav-Med 1327 (3-51). The form is adopted by BuMed for the reporting to the Bureau of the air evacuation and transportation of patients by the several Fleet Logistic Wings.

The original and one copy of the completed form shall be submitted to the Chief of the Bureau of Medicine and Surgery (Code 536) monthly as of 2400 on the last day of the month, beginning with the month ending 31 May 1951.

The completed reports shall be forwarded before the 10th day of the month following the month reported upon.

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The Preventive Medicine Division announces the issuance of "Preventive Medicine Notes" (NAVMED P-1329). The first issue, dated 25 May 1951, is being distributed to Preventive Medicine activities and personnel.

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NAVY DEPARTMENT
BUREAU OF MEDICINE AND SURGERY
WASHINGTON 25, D. C.

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